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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,218	12/19/2000	Yutaka Kai	1460.1014	3091

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EXAMINER

NGUYEN, TUAN M

ART UNIT PAPER NUMBER

2828

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/739,218

Applicant(s)

KAI ET AL.

Examiner

Tuan M Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding to claims 1, 14-16 and 17, the claims recites a light source having a plurality of lasers **capable of** oscillating at a plurality of wavelengths. It has been held that the recitation that an element is "**capable of**" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Regarding to claim 2, claim recites a length of a period of said etalon filter is substantially equal to a length of said wavelength spacing. It is unclear as what the substantially is meant which render the claim confusing, vague and indefinite.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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Claims 1-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Chung et al (6,349,103).

With respect to claims 1 and 14-18, Chung et al discloses a light source having a plurality of laser (DFB1, DFB2, DFB3 DFBN), an etalon filter (50) having a periodic transmittance wavelength characteristic for receiving laser light output from said light source, light detecting means (60, 70) for receiving laser light output from said etalon filter and detecting light intensity of the received laser light, controlling means (100) for generating oscillation of any one of said plurality of lasers at a desired wavelength, and for controlling an oscillation wavelength of the laser so that an output value of said light detecting means become equal to a target value corresponding to said desired wavelength among a plurality of target values respectively set for each of said plurality of wavelengths, note col. 1 line 30 to col. 8 line 18, see fig. 2.

With respect to claims 2-3, Chung et al discloses laser light output from said light source has nearly constant wavelength spacing, a length of a period of said etalon filter is substantially equal to a length of said wavelength spacing and each of plurality of target value is set at a value between two adjacent extremums of transmittance wavelength characteristic and target value corresponding to a center wavelength of plurality of wavelength is set at a value at approximately the center of two adjacent extremums of transmittance wavelength, note col. 4 line 10 to col. 7 line 65, see figs 1-7.

With respect to claims 4-5, Chung et al discloses controlling means controls oscillation wavelength after generating oscillation of one laser at a wavelength which is in a range include a wavelength approximately at the center of two adjacent extremums of transmittance wavelength and closet to desired wavelength, note col. 1 line 30 to col. 6 line 67, see figs. 1-7.

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With respect to claims 6-13, Chung et al discloses amplifying means (80), for amplifying laser light, controlling means (100) controls oscillation wavelength, and controlling driving current, detecting means (60, 70) corresponding with the plurality of etalon filter (50), and lasers (DFB1-DFBN), note col. 1 line 30 to col. 8 line 67, see figs 2 and 7.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### **Citation Of The Pertinent References**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Zhang et al (US patent 6,411,634) discloses cost effective high precision wavelength locker.

The patent to Stayt, Jr. et al (US patent 6,389,046) discloses method to sense laser array power and wavelength and reduce drift for wavelength selection and stabilization.

The patent to Thonn (US patent 5,144,632) discloses laser with actively stabilized etalon for single frequency operation.

### ***Communication Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan M Nguyen whose telephone number is (703) 306-0247.

The examiner can normally be reached on 8am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.



Paul Ip  
SPE  
Art unit 2828

TMN  
January 10, 2003